

light source 80 can comprise of a light projector or a laser beam with raster scanning capability that illuminates the plurality of fountains 55. The presence of many droplets in the fountain scatters the light and cause the formation of colorful vivid light patterns. FIG. 5 represents a block diagram of the drive electronics. The signals that generate the fountains and fog 122 are modulated by a rhythmic sound that is generated by various sound sources 115 modalities including a computer generated signal, a synthesizer or a music source. The music source includes radio, tape recorder, recorded disk and other forms of recoded music. Modulating the emission of the light 82 from the source 80 synchronizes the variations in the scattered light 85 with the changes in the injected fluid height or fog 55. This modulation causes the fountains high and the fluid flow rate to vary synchronously with the rhythm of the sound of music and creates controllable audiovisual effects.

#### **WHAT IS CLAIMED:**

1. An apparatus that produces plurality of focused ultrasonic waves onto the surface of fluid generating controlled fountains or fog, comprising of
  - a. A plurality of concave focused piezoelectric transducers immersed in a fluid.
  - b. A signal function generator that drives the individual transducers with a cyclic signal at one or more of their resonance frequencies.
  - c. A sound emitter comprising of a computer controlled signal generator, music emitting device, or sound synthesizer source that produces signals that modulates the cyclic signal drives the transducers
  - d. An amplifier that amplifies the drive signals to generate high power ultrasonic waves by the transducers
  - e. A light generator that illuminates the fountains and fog
2. The apparatus of claim 1, wherein said comprising of concave curved piezoelectric transducers with air backing that radiates ultrasonic waves in the forward direction.
3. The apparatus of claim 1, further comprising of a controllable generator that changes the drive frequency of the transducer to emit plurality of effects that include fountains, fog and their combinations.
4. The apparatus of claim 1, further comprising of a controllable generator that drives synchronously the appearance of fountains and fogs, harmoniously with projected light at the rhythm of sound